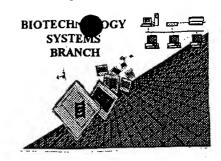
RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/963,668

Source: 01PE

Date Processed by STIC: /0/10/200/

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PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

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2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRE SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 c-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 c-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW

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http://www.uspto.gov/web/offices/pac/checker

OIPE

RAW SEQUENCE LISTING DATE: 10/10/2001 PATENT APPLICATION: US/09/963,668 TIME: 10:56:12

Input Set : A:\000425 BTe AL1_Dpckaec.app
Output Set: N:\CRF3\10102001\1963668.raw

Does Not Comply
Corrected Diskette Needed

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3 <110> APPLICANT: Degussa AG
5 <120> TITLE OF INVENTION: Process for the fermentative preparation of
6 L-amino acids using strains of the
7 Enterobacteriaceae family.
9 <130> FILE REFERENCE: 000425 BT
11 <140> CURRENT APPLICATION NUMBER: US/09/963,668
12 <141> CURRENT FILING DATE: 2001-09-27
14 <160> NUMBER OF SEQ ID NOS: 19
16 <170> SOFTWARE: PatentIn Ver. 2.1
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ERRORED SEQUENCES

18 <210> SEQ ID NO: 1

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20 <212> TYPE: DNA
21 <213> ORGANISM: Escherichia coli
23 <220> FEATURE:
24 <221> NAME/KEY: CDS
25 <222> LOCATION: (1)..(1620)
26 <223> OTHER INFORMATION: pckA
28 <400> SEQUENCE: 1
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30 Met Arg Val Asn Asn Gly Leu Thr Pro Gln Glu Leu Glu Ala Tyr Gly
33 atc agt gac gta cat gat atc gtt tac aac cca agc tac gac ctg ctg
34 Ile Ser Asp Val His Asp Ile Val Tyr Asn Pro Ser Tyr Asp Leu Leu
37 tat cag gaa gag ctc gat ccg agc ctg aca ggt tat gag cgc ggg gtg
                                                                      144
38 Tyr Gln Glu Glu Leu Asp Pro Ser Leu Thr Gly Tyr Glu Arg Gly Val
            35
                                40
                                                     45
41 tta act aat ctg ggt gcc gtt gcc gtc gat acc ggg atc ttc acc ggt
                                                                      192
42 Leu Thr Asn Leu Gly Ala Val Ala Val Asp Thr Gly Ile Phe Thr Gly
                            55
45 cgt toa coa aaa gat aag tat ato gto ogt gao gat acc act ogo gat
                                                                      240
46 Arg Ser Pro Lys Asp Lys Tyr Ile Val Arg Asp Asp Thr Thr Arg Asp
                                             75
49 act ttc tgg tgg gca gac aaa ggc aaa ggt aag aac gac aac aaa cct
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50 Thr Phe Trp Trp Ala Asp Lys Gly Lys Gly Lys Asn Asp Asn Lys Pro
                    85
53 ctc tct ccg gaa acc tgg cag cat ctg aaa ggc ctg gtg acc agg cag
                                                                      336
54 Leu Ser Pro Glu Thr Trp Gln His Leu Lys Gly Leu Val Thr Arg Gln
57 ctt tcc ggc aaa cgt ctg ttc gtt gtc gac gct ttc tgt ggt gcg aac
                                                                      384
58 Leu Ser Gly Lys Arg Leu Phe Val Val Asp Ala Phe Cys Gly Ala Asn
59
           115
                               120
62 ccg gat act cgt ctt tcc gtc cgt ttc atc acc gaa gtg gcc tgg cag
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RAW SEQUENCE LISTING DATE: 10/10/2001 PATENT APPLICATION: US/09/963,668 TIME: 10:56:12

Input Set : A:\000425 BTe AL1_Dpckaec.app
Output Set: N:\CRF3\10102001\1963668.raw

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| 66 | gcg | cat | ttt | gtc | aaa | aac | atg | ttt | att | cgc | ccg | agc | gat | gaa | gaa | ctg | 480 |
| 67 | Ala | His | Phe | Val | Lys | Asn | Met | Phe | Ile | Arq | Pro | Ser | Asp | Glu | Glu | Leu | |
| | 145. | | | | - | 150 | | | | _ | 155 | | - | | | 160 | |
| | | aat. | ttc | aaa | cca | σac | ttt | atc | at.t. | at.g | aac | aac | aca | aaσ | tac | act | 528 |
| | | | | Lys | | | | | | | | | | | | | |
| 72 | niu | 011 | 1 110 | L 15 | 165 | ···OP | 2 220 | | , | 170 | | Q = 1 | | | 175 | | |
| | 220 | 000 | a2 a | tgg | | π22 | сал | aat | ata | | too | maa | 220 | tta | | aca | 576 |
| | | | | Trp | | | | | | | | | | | | | 370 |
| | ASII | PIO | GIII | _ | гур | GIU | GIII | СТУ | | ASII | 261 | GIU | ASII | | Val | на | |
| 76 | | | | 180 | | | ~+~ | ~~~ | 185 | -++ | ~~~ | ~~~ | | 190 | + | ~~~ | 624 |
| | | | | acc | | | | | | | | | | | | | 024 |
| | Pne | Asn | | Thr | GIU | Arg | мес | | Leu | тте | СТА | GTÄ | | ттр | TYL | СТА | |
| 80 | | | 195 | | | | | 200 | | | | | 205 | | | | 670 |
| | | | | aag | | | | | | | | | | | | | 672 |
| | Gly | | Met | Lys | Lys | GLY | | Phe | Ser | Met | Met | | Tyr | Leu | Leu | Pro | |
| 84 | | 210 | | | | | 215 | | | | | 220 | | | | | |
| | | | | atc | | | | | | | | | | | | | 720 |
| 87 | Leu | Lys | Gly | Ile | Ala | Ser | Met | His | Cys | Ser | | Asn | Val | Gly | Glu | | |
| | 225 | | | | | 230 | | | | | 235 | | | | | 240 | |
| | | | | gcg | | | | | | | | | | | | | 768 |
| 91 | Gly | Asp | Val | Ala | | Phe | Phe | Gly | Leu | Ser | Gly | Thr | Gly | Lys | | Thr | |
| 92 | | | | | 245 | | | | | 250 | | | | | 255 | | |
| | | | | gac | | | | | | | | | | | | | 816 |
| 95 | Leu | Ser | \mathtt{Thr} | Asp | Pro | Lys | Arg | Arg | Leu | Ile | Gly | Asp | Asp | Glu | His | Gly | |
| 96 | | | | 260 | | | | | 265 | | | | | 270 | | | |
| | | | | gac | | | | | | | | | | | | | 864 |
| 99 | Trp | Asp | Asp | Asp | Gly | Val | Phe | Asn | Phe | Glu | Gly | Gly | Cys | Tyr | Ala | Lys | |
| 100 | | | 275 | 5 | | | | 280 | | | | | 285 | 5 | | | |
| 102 | act | ato | aag | , ctg | tcg | aaa | gaa | ı gcg | gaa | cct | gaa | ı ato | tac | aac | gct | atc | 912 |
| 103 | Thr | Ile | Lys | Leu | Ser | Lys | Glu | ı Ala | Glu | Pro | Glu | ı Ile | Yır | Asr | n Ala | ı Ile | |
| 104 | | 290 |) | | | | . 295 | 5 | | | | 300 |) | | | • | |
| 106 | cgt | . cgt | gat | gcg | ttg | ctg | gaa | aac | gto | acc | gtg | , cgt | . gaa | ı gat | ggc | c act | 960 |
| 107 | Arg | Arg | Asp | Ala | Leu | Leu | ı Glü | ı Asn | Val | Thr | · Val | . Arg | g Glu | ı Asp | Gly | Thr | |
| 108 | 305 | ı | | | | 310 | 1 | | | | 315 | i | | | | 320 | |
| 110 | ato | gac | ttt | gat | gat | ggt | . tca | aaa | acc | gag | aac | acc | e ege | gtt | tct | tat | 1008 |
| 111 | Ile | Asp | Phe | Asp | Asp | Gly | ser | Lys | Thr | Glu | Asr | Thi | Arg | [Va] | . Sei | Tyr | |
| 112 | | | | | 325 | | | | | 330 |) | | | | 335 | 5 | |
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| 115 | Pro | Ile | Tyr | His | Ile | Asp | Asn | ıle | Val | Lys | Pro | Va] | Ser | Lys | : Ala | Gly | |
| 116 | | | | 340 | | | | | 345 | | | | | 350 |) | | |
| 118 | cac | gcg | act | aag | gtt | ato | tto | ctg | act | gct | gat | gct | : ttc | ggc | gtg | , ttg | 1104 |
| | | | | | | | | | | | | | | | | Leu | |
| 120 | | | 355 | - | | | | 360 | | | - | | 365 | _ | | | |
| | | CCQ | gtt | tct | cqc | cta | act | gcc | gat | caa | acc | cac | tat | cac | tto | ctc | 1152 |
| | | | | | | | | | | | | | | | | Leu | |
| 125 | | 370 | | | - 3 | | 375 | | ·- F | | | 380 | | | | | |
| | | | | add | gee | aaa | | | gat | act | gao | | | ato | acc | gaa | 1200 |
| | | | | | | | | | | | | | | | | Glu | |
| 120 | 001 | O L Y | - 116 | | | - 22 | | | y | | | | , 523 | | | | |

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/963,668

DATE: 10/10/2001 TIME: 10:56:12

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Output Set: N:\CRF3\10102001\1963668.raw

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| | 133 | | | | | 405 | | | | | 410 | | | | | 415 | | |
| | 135 | cac | ccg | act | cag | tac | gca | gaa | gtg | ctg | gtg | aaa | cgt | atg | cag | gcg | gcg | 1296 |
| | 136 | His | Pro | Thr | Gln | \mathtt{Tyr} | Ala | Glu | Val | Leu | Val | Lys | Arg | Met | Gln | Ala | Ala | |
| | 137 | | | | 420 | | | | | 425 | | | | | 430 | | | |
| | 139 | ggc | gcg | cag | gct | tat | ctg | gtt | aac | act | ggc | tgg | aac | ggc | act | ggc | aaa | 1344 |
| | 140 | Gly | Ala | Gln | Ala | \mathtt{Tyr} | Leu | Val | Asn | Thr | Gly | \mathtt{Trp} | Asn | Gly | Thr | Gly | Lys | |
| | 141 | | | 435 | | | | | 440 | | | | | 445 | | | | |
| | 143 | cgt | atc | tcg | att | aaa | gat | acc | cgc | gcc | att | atc | gac | gcc | atc | ctc | aac | 1392 |
| | 144 | Arg | Ile | Ser | Ile | Lys | Asp | Thr | Arg | Ala | Ile | Ile | Asp | Ala | Ile | Leu | Asn | |
| | 145 | | 450 | | | | | 455 | | | | | 460 | | | | | |
| | | | _ | _ | _ | aat | - | | | | | _ | _ | _ | | | _ | 1440 |
| | | _ | Ser | Leu | Asp | Asn | | Glu | Thr | Phe | Thr | | Pro | Met | Phe | Asn | | |
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| | _ | , , | | | | gaa | | _ | 5 5 | _ | _ | _ | _ | | | - | _ | 1488 |
| | | Ala | Ile | Pro | Thr | Glu | Leu | Pro | Gly | Val | - | Thr | Lys | Ile | Leu | - | Pro | |
| | 153 | | | | | 485 | | | | | 490 | | | | | 495 | | 4506 |
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| | | Arg | Asn | Thr | _ | Ala | Ser | Pro | Glu | | Trp | GIn | GIu | Lys | | GLu | Thr | |
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| | | | | | | ttt | | | | | | | | | | | | 1584 |
| | | Leu | Ala | _ | Leu | Phe | тте | Asp | | Pne | Asp | ьуs | Tyr | | Asp | Thr | Pro | ~ |
| | 161 | | | 515 | | | | | 520 | | | | | 525 | | | , | (1622) |
| | | | | | | ctg | | | | | | | | caa | | | | (1623) |
| | | ΑΙα | _ | Ата | Ата | Leu | val | | ата | GTÀ | Pro | ьys | | | | | | |
| E> | 165 | | 530 | | | | | 535 | | | | | 540 | | | | | |

VERIFICATION SUMMARY

DATE: 10/10/2001 TIME: 10:56:13 PATENT APPLICATION: US/09/963,668

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L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:165 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1622 Found:1623 SEQ:1